

**Notice of Allowability**

Application No.

10/603,342

Examiner

Chuc D. Tran

Applicant(s)

MIKAMI ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to October 23, 2006.
2. ☒ The allowed claim(s) is/are 1-8 and 10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



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## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims 1-8 and 10 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a through hole defined by a vehicle body made of metal, the through hole defining an imaginary planar body having a thickness equal to a thickness of the vehicle body disposed in the through hole and continuous with the vehicle body; (b) a planar antenna having a radiating element and a ground plate, wherein the radiating element is spaced in one direction from one surface of the vehicle body, and the ground plate is spaced in an opposite direction from an opposite surface of the vehicle body such that the imaginary body is interposed between the radiating element and the ground plate in claim 1, (claims 2-6 are allowed since they are dependent on claim 1).

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a method of boring a hole through a body of the vehicle, the hole defining an imaginary body having a thickness equal to a thickness of the body disposed in the hole and continuous with the body of the vehicle; (b) a method of locating the planar antenna in the through hole so that the imaginary body is positioned between the radiating element and the ground plate.

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a through hole defined by a metal attachment plate, the through hole defining an imaginary body having a thickness equal to a thickness of the metal attachment plate disposed in the through hole and continuous with the metal attachment plate; (b) a planar antenna having a radiating element and a ground plate, wherein the radiating element is spaced in one direction from one surface of

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the metal attachment plate; (c) the ground plate is spaced in an opposite direction from an opposite surface of the metal attachment plate such that the imaginary body is interposed between the radiating element and the ground plate; (d) the metal attachment plate is integral with a vehicle body.

Prior art Egashira fails to disclose in combination with the remaining limitation: (a) a planar antenna having a radiating element and a ground plate; (b) a metal vehicular body, the vehicular body defining a through hole which has an internal edge and an imaginary body having a thickness equal to a thickness of the metal vehicle body that is disposed within the through hole and is continuous with the vehicular body, wherein the imaginary body is located between the radiating element and the ground plate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Drawings***

3. The drawings were received on June 25, 2006. These drawings are accepted.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC  
November 30, 2006



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PRIMARY EXAMINER